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| 10/661,158  | 09/11/2003  | Takayuki Sato        | 59739 (47793)       | 6782             |
| 21874   | 7590        | 11/21/2006           | EXAMINER            |                  |
| EDWARDS & ANGELL, LLP<br>P.O. BOX 55874<br>BOSTON, MA 02205 |             |                      | PAN, JOSEPH T       |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2135                |                  |

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/661,158

Applicant(s)

SATO ET AL.

Examiner

Joseph Pan

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/5/04&9/11/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 11-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

#### Referring to claim 11:

Claim 11 recites "A communication setting program used for an interconnecting device that performs communication settings of a computer network; comprising: a reading module for reading authentication information of an attachable and removable nonvolatile memory and settings for said computer network from said nonvolatile memory; an authentication module for authenticating whether said authentication information read by said reading module satisfies a predetermined condition; and a transmitting module for transmitting said settings to a communication device, which performs communication in said computer network, in order to perform communication settings of said computer network based on said settings read by said reading module when said authentication information satisfies said predetermined condition." A computer program, which consists of modules, is merely a set of instructions capable of being executed by a computer, so the computer program itself is not a process. Therefore, a claim for a computer program, without the computer-readable medium needed to realize the computer program functionality, is treated as

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nonstatutory functional descriptive material. Therefore, claim 11 recites non-statutory subject matter.

Referring to claims 12-13:

Claims 12-13 depend on claim 11, therefore they are rejected with the same rationale applied against claim 11 above.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrow et al. (U.S. Patent No. 6,175,917 B1), hereinafter "Arrow", in view of Vanzini et al. (U.S. Patent No. 7,036,738 B1), hereinafter "Vanzini".

Referring to claims 1, 14:

i. Arrow teaches:

An interconnecting device for interconnecting communication in a computer network, comprising:

a holding unit for holding an memory (see e.g. figure 4, element 404 'storage memory' of Arrow);

a reading unit for reading authentication information and settings for said computer network (see column 9, lines 18-25, lines 33-45; and column 12, lines 1-10 of Arrow);

an authentication unit for authenticating whether said authentication information read by said reading unit satisfies a predetermined condition (see column 9, lines 18-25, lines 33-45 of Arrow); and

a transmitting unit for transmitting said settings to a communication device, which performs communication in said computer network, in order to perform communication settings of said computer network based on said settings read by said reading unit when said authentication information satisfies said predetermined condition (see figure 7, element 724 'routing module'; and column 9, lines 18-25, lines 33-45; and column 12, lines 1-10 of Arrow).

However, Arrow does not specifically mention the removable nonvolatile memory.

ii. Vanzini teaches a portable profile carrier stores and securely transport a user's profile and data files from one computer to the next, wherein Vanzini discloses the removable nonvolatile memory (see figure 4, element 54 'profile carrier' of Vanzini).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Vanzini into the method of Arrow to use the removable nonvolatile memory to store the authentication and the configuration information.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Vanzini into the system of Arrow to use the removable nonvolatile memory to store the authentication and the configuration information, because Arrow teaches securely transferring configuration data from the VPN [i.e., virtual private network] management station to a VPN unit (see e.g. figure 1, elements 160, 115 of Arrow), and Vanzini teaches using the removable nonvolatile memory to store and securely transport data files from one computer to the next (see abstract, lines

1-2 of Vanzini). Therefore, Vanzini's method could be utilized to facilitate transferring configuration data in Arrow's system.

Referring to claim 2:

Arrow and Vanzini disclose the claimed subject matter: an interconnecting device for interconnecting communication in a computer network (see claim 1 above). They further disclose the encryption and decryption unit (see figure 7, element 730 'encryption/decryption unit' of Arrow).

Referring to claim 3:

Arrow and Vanzini disclose the claimed subject matter: an interconnecting device for interconnecting communication in a computer network (see claim 1 above). They further disclose the setting unit (see column 12, lines 1-10 of Arrow).

Referring to claims 4, 12:

Arrow and Vanzini disclose the claimed subject matter: an interconnecting device for interconnecting communication in a computer network (see claim 1 above). They further disclose the other interconnecting devices (see figure 1, elements 115, 125, 135, 145, 155 of Arrow).

Referring to claims 5, 13:

Arrow and Vanzini disclose the claimed subject matter: an interconnecting device for interconnecting communication in a computer network (see claim 1 above). They further disclose the management apparatus (see figure 1, element 160 'VPN management station' of Arrow).

Referring to claim 6:

Arrow and Vanzini disclose the claimed subject matter: an interconnecting device for interconnecting communication in a computer network (see claim 1 above). They further disclose the receiving unit and the setting unit (see figure 7, element 710 'configuration module'; and column 12, lines 1-10 of Arrow).

Referring to claims 9-10:

Arrow and Vanzini disclose the claimed subject matter: an interconnecting device for interconnecting communication in a computer network (see claim 1 above). They further disclose the storage unit (see e.g. figure 4, element 404 'storage memory'

of Arrow), and the communication controller (see figure 7, element 724 'routing module' of Arrow).

Referring to claim 11:

i. Arrow teaches:

A communication setting program used for an interconnecting device that performs communication settings of a computer network; comprising:

a reading module for reading authentication information and settings for said computer network from said nonvolatile memory (see column 9, lines 18-25, lines 33-45; and column 12, lines 1-10 of Arrow);

an authentication module for authenticating whether said authentication information read by said reading module satisfies a predetermined condition (see column 9, lines 18-25, lines 33-45; and column 12, lines 1-10 of Arrow); and

a transmitting module for transmitting said settings to a communication device, which performs communication in said computer network, in order to perform communication settings of said computer network based on said settings read by said reading module when said authentication information satisfies said predetermined condition (see figure 7, element 724 'routing module'; and column 9, lines 18-25, lines 33-45; and column 12, lines 1-10 of Arrow).

However, Arrow does not specifically mention the removable nonvolatile memory.

ii. Vanzini teaches a portable profile carrier stores and securely transport a user's profile and data files from one computer to the next, wherein Vanzini discloses the removable nonvolatile memory (see figure 4, element 54 'profile carrier' of Vanzini).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Vanzini into the method of Arrow to use the removable nonvolatile memory to store the authentication and the configuration information.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Vanzini into the system of Arrow to use the removable nonvolatile memory to store the authentication and the configuration information, because Arrow teaches securely transferring configuration data from the VPN [i.e., virtual private network] management station to a VPN unit (see e.g. figure 1, elements 160, 115 of Arrow), and Vanzini teaches using the removable nonvolatile memory to store and securely transport data files from one computer to the next (see abstract, lines 1-2 of Vanzini). Therefore, Vanzini's method could be utilized to facilitate transferring configuration data in Arrow's system.

4. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrow et al. (U.S. Patent No. 6,175,917 B1) in view of Vanzini et al. (U.S. Patent No. 7,036,738 B1), and further in view of Raab et al. (U.S. Patent No. 5,751,967), hereinafter "Raab".

Referring to claims 7-8:

i. Arrow and Vanzini disclose the claimed subject matter: an interconnecting device for interconnecting communication in a computer network (see claim 1 above). They further disclose Virtual Private Network (VPN) (see column 6, lines 61-62 of Arrow).

However, They do not specifically mention Virtual Local Area Network (VLAN).

ii. Raab teaches a method for automatically configuring a network device to support a virtual network, wherein Raab discloses the VLAN (see column 1, lines 65-67 of Raab).



iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Rabb into the method of Arrow and Vanzini to support configuring VLAN.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Rabb into the system of Arrow and Vanzini to support configuring VLAN, because Arrow and Vanzini teach configuring an interconnecting device, such as a virtual private network device (see e.g. figure 1, element 115 'VPN unit' of Arrow), and Rabb teaches configuring a virtual local area network device (see figure 4, element 401 'config file'; and column 1, lines 65-67 of Rabb), therefore, both teach configuring a virtual network device. By combining Rabb's teaching into the system of Arrow and Vanzini, The system of Arrow and Vanzini would become more versatile.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Pan whose telephone number is 571-272-5987.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

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Joseph Pan  
November 14, 2006



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